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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KEVIN L. PARSONS

Appeal 2009-004624
Application 10/625,020
Technology Center 3700

Decided: January 12, 2010

Before LINDA E. HORNER, JOHN C. KERINS and
STEVEN D.A. McCARTHY, *Administrative Patent Judges*.

McCARTHY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision finally rejecting claims 55, 56, 59-61 and 64-73 under 35 U.S.C. § 112, second paragraph, as being indefinite; and finally rejecting claims 75-79, 81-91 and 96-102 under 35 U.S.C. § 103(a) as being unpatentable over

DeLucia (US 3,776,429, issued Dec. 4, 1973) and Parsons (US 6,283,609 B1, issued Sep. 4, 2001). The Examiner objects to claims 57, 58, 62, 63, 80 and 92-95. We have jurisdiction under 35 U.S.C. § 6(b).

We sustain the rejections of claims 75-77, 83 and 87-90. We do not sustain the rejections of any of the remaining claims.

Claims 55, 75 and 91 are independent. Claim 55 recites:

> 55. A tactical defense device for dispersing a chemical from a pressurized spray cartridge, comprising:
>
> a dispenser adapted to receive the pressurized spray cartridge;
>
> the dispenser having a first end defining a forward portion and an opposite second end;
>
> the forward portion having a discharge orifice for dispersing the chemical through the discharge orifice in a generally axial direction relative to a longitudinal axis of the dispenser;
>
> an actuator for movement in a generally axial direction relative to the longitudinal axis, between a normally inactivated position and an activated position for dispersing the chemical;
>
> an expandable baton portion adapted for connection to the second end;
>
> a cap accessible on a side surface of the dispenser;
>
> the cap movable between first and second positions;

> wherein, in the first position, the cap may be depressed in a generally radial direction relative to the longitudinal axis mechanically causing the actuator movement, with movement of the cap between the first and second positions being in a direction that is different than the generally radial direction;
>
> wherein depression of the cap is prevented when the cap is in the second position; and
>
> wherein the device is generally cylindrical about the longitudinal axis.

The Appellant's Specification discloses an embodiment *10* of a tactical defense device in accordance with claim 55. The embodiment *10* includes a dispenser *14* connected to an expandable baton portion *12* by a connector coupling *16*. (*See* Spec. 5-6, paras. 0039-40.) The dispenser *14* includes a pressurized spray cartridge *40*. The spray cartridge *40* of the embodiment *10* has a discharge nozzle *42* aligned with a discharge orifice *62* through a nozzle plate *50*. The spray cartridge *40* releases its pressurized contents through the discharge orifice *62* when the discharge nozzle *42* is depressed axially into the cartridge. (Spec. 7, paras. 0044-45 and 8, para. 0047.) In other words, the spray cartridge *40* releases its pressurized contents when the cartridge is pressed axially forwardly and the reaction force exerted by the nozzle plate *50* presses the nozzle *42* into the cartridge.

The connector coupling *16* of the embodiment *10* houses a switching mechanism *13* for pressing the spray cartridge *40* forwardly to release the contents of the cartridge. (*See* Spec. 5, para. 0039.) The switching mechanism includes a safety slide button *80* with a cap portion *98*; an actuator button *78*; and a plunger actuator *72*. (Spec. 9, para. 0052 and 10,

para. 0054.) The actuator button *78* is mounted on a vertical guide pin *74* so as to restrain the actuator button *78* to move only in a radial direction.

The actuator button *78* and the plunger actuator *72* have cooperating beveled surfaces *78c*, *72c*. By means of these beveled surfaces *78c*, *72c*, the actuator button *78* and the plunger actuator *72* convert radial force applied to the actuator button *78* into an axial force. The plunger actuator *72* applies the axial force to the spray cartridge *40* to release the pressurized contents of the cartridge. (Spec. 9, para. 0052.) The cap portion *98* of the embodiment *10* does not apply any force directly to either the plunger actuator *72* or the spray cartridge *40*.

ISSUES

The Examiner concludes that claim 55 and its dependent claims 56, 59-61 and 64-73 are indefinite because the claims fail to recite an actuating button for transferring force from the cap to the actuator. The Examiner finds that the Appellant has not disclosed an embodiment operable without an actuator button. (Ans. 7-8.) The Examiner concludes that claims 55, 56, 59-61 and 64-73 are ambiguous because one of ordinary skill in the art would be unable to determine what additional structure must be read into the claim in order to render the claimed device operable. (Ans. 8-9.) The Appellant disagrees. (Reply Br. 2.)

The Appellant does not present any arguments which might suggest that any of dependent claims 76, 77, 79, 83 and 87-90 might be patentable over DeLucia and Parsons if independent claim 75 is not. (*See* App. Br. 9.[1])

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[1] The Appellant does not separately argue claim 82, either. (*See* App. Br. 9.) Nevertheless, claim 82 recites "a nozzle plate supported within the

Therefore, the Appellant has grouped claims 75-77, 79, 83 and 87-90. Claim 75 is representative of the group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

The Examiner finds that DeLucia discloses a slidingly insertable sleeve for holding a pressurized spray cartridge (Ans. 5 and 9), as recited in independent claim 75; a guide pin for guiding movement of an actuator button caused by depression of the actuator button in a generally radial direction (Ans. 6), as recited in claim 78; and a nozzle plate which is supported within the forward portion of the dispenser and which defines a discharge orifice (Ans. 10), as recited in independent claim 91 as well as in claims 81, 82, 84 and 85. The Appellant disagrees. (*See generally* App. Br. 9-14; Reply Br. 4-6.) The Examiner articulates no reasoning independent of these findings which might explain why a tactical defense device having these features would have been obvious from the combined teachings of DeLucia and Parsons.

This appeal turns on four issues:

> Has the Appellant shown that the Examiner erred in concluding that claim 55 fails to particularly point out and distinctly claim the subject matter which the Appellant regards as the invention?
>
> Has the Appellant shown that the Examiner erred in finding that DeLucia discloses a slidingly insertable sleeve for holding a pressurized spray cartridge as recited in claim 75?

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forward portion and defining the discharge orifice." The Appellant argues that similar language distinguishes the subject matter of claims 81, 84, 85 and 91 from the combined teachings of DeLucia and Parsons. For this reason, claim 82 will not be grouped with claim 75 for purposes of this appeal.

Has the Appellant shown that the Examiner erred in finding that DeLucia discloses a guide pin for guiding movement of an actuator button caused by depression of the actuator button in a generally radial direction as recited in claim 78?

Has the Appellant shown that the Examiner erred in finding that DeLucia discloses a nozzle plate which is supported within the forward portion of the dispenser and which defines a discharge orifice as recited in claims 81, 82, 84, 85 and 91?

FINDINGS OF FACT

The record supports the following findings of fact ("FF") by a preponderance of the evidence.

1. DeLucia describes a combination flashlight and protective device *10* including a housing *12*. (DeLucia, col. 2, ll. 14-20.) The housing *12* includes an elongated tubular portion *14* and an enlarged head portion *17*. (DeLucia, col. 2, ll. 21-29.)

2. The elongated tubular portion *14* of the housing *12* of DeLucia's device *10* encloses a propellant capsule or spray cartridge *44*. (DeLucia, col. 2, ll. 40-42.)

3. DeLucia's propellant capsule *44* is longitudinally slidable within a sleeve *46*. (*Id.*)

4. DeLucia's sleeve *46* is riveted to the housing *14* after the sleeve is inserted into the housing. (*Id.*)

5. Figure 1 of DeLucia depicts the elongated tubular portion *14* as being cylindrical in shape. Figure 1 depicts the elongated tubular section *14* as being open at its forward end.

6. Figure 1 of DeLucia depicts the sleeve *46* as being cylindrical in shape, with an outer diameter smaller than the inner diameter of the elongated tubular portion *14*.

7. As such, DeLucia's sleeve *46* is configured so as to be susceptible of insertion into the elongated tubular portion *14* by introducing the sleeve *46* and a retainer *72* through the opening at the front end of the elongated tubular portion *14* and then sliding the sleeve *46* and the retainer *72* along an upper portion of the inner surface of the elongated tubular portion *14* until the sleeve *46* is positioned for riveting.

8. DeLucia's propellant capsule *44* includes neck *56*. A wall *60* positioned near the forward end of the elongated tubular portion *14* mounts a cap *58* for engaging the neck *56* of the propellant capsule *44*. The cap *58* includes an axially extending, rigidly fixed tube *62* positioned to open an internal valve in the propellant capsule *44*. When the propellant capsule *44* slides forwardly in the sleeve *46*, the rigid tube *62* actuates the internal valve to discharge the propellant from the propellant capsule *44*. (DeLucia, col. 2, ll. 49-64.)

9. A discharge tube *68* defining an orifice *66* is snap-fitted into a receptacle *70*. (DeLucia, col. 2, ll. 66-68.)

10. A flexible tube *64* conducts propellant discharged from the propellant capsule *44* to the discharge tube *68* for discharge through the orifice *66*. (DeLucia, col. 2, ll. 57-64.)

11. A removable retainer *24* positions a lens *25* at the front end of the enlarged head portion *17*. (DeLucia, col. 2, ll. 21-29.)

12. Figure 1 of DeLucia depicts the receptacle *70* as positioning the discharge tube *68* defining the orifice *66* radially outwardly from the lens *25*.

13. DeLucia describes vertically disposing a push button *122* formed from a translucent red plastic material on a switch housing *92* mounted on the elongated tubular portion *14*. (DeLucia, col. 3, ll. 54-60, col. 4, ll. 30-33 and fig. 1.)

14. DeLucia also describes vertically disposing a plunger *124* with an enlarged head portion *126* through the housing of the elongated tubular portion *14*. (DeLucia, col. 4, ll. 9-14.)

15. Figure 1 of DeLucia depicts the push button *122* as being vertically aligned with the enlarged head portion *126* of the plunger *124*. A slide block *130* fixed to the radially inward end of the plunger *124* has an inclined cam surface *132* in sliding engagement with a complementary cam surface *134* of a fixed block *136*. (DeLucia, col. 4, ll. 9-18.) When a leaf spring *104* interposed between the push button *122* and the plunger *124* is correctly positioned and the push button *122* is depressed radially inwardly, sliding engagement between an inclined cam surface *132* of a slide block *130* fixed to the radially inward end of the plunger *124* and a complementary cam surface *134* of a fixed block *136* causes forward movement of the propellant capsule *44* so as to discharge the propellant from the capsule *44*. (*See* DeLucia, col. 4, ll. 19-26.)

16. DeLucia discloses providing an optic rod *138* extending upwardly through the plunger *124* for illuminating the push button *122*. (DeLucia, col. 4, ll. 30-33 and 36-40.)

17. Figures 1 and 2 of DeLucia depict the push button *122* as not directly contacting either the plunger *124* or the optic rod *138*. Instead, a lower surface of the push button *122* appears to abut a flat upper surface of the leaf spring *104* and a flat lower surface of the leaf spring *104* appears to abut upper surfaces of the plunger *124* and the optic rod *138*.

18. Neither the plunger *124* nor the optic rod *138* appears to guide the movement of the push button *122* in a generally radial direction.

19. Parsons discloses a flashlight *10* including a flashlight body *20* and an endcap *402* which functions as an adapter for securing the flashlight *10* to another implement such as an expandable baton *60*. (Parsons, col. 8, ll. 3-6; col. 10, ll. 1-3; col. 12, ll. 4-6 and 51-60.) Parsons does not disclose structure for discharging a spray from a spray capsule.

PRINCIPLES OF LAW

A claim under examination is given its broadest reasonable interpretation consistent with the underlying specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). In the absence of an express definition of a claim term in the specification or a clear disclaimer of scope, the claim term is interpreted as broadly as the ordinary usage of the term by one of ordinary skill in the art would permit. *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007); *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). Properties of preferred embodiments described in the specification which are not recited in a claim do not limit the reasonable scope of the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003).

The second paragraph of § 112 imposes two duties on an applicant. First, the applicant's claims must be definite. The definiteness requirement is met if "one skilled in the art would understand the bounds of the claim when read in light of the specification." *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). A claim is indefinite if the language of the claim is susceptible of no reasonable interpretation. *Id.* A claim under examination susceptible of more than one reasonable interpretation may be indefinite if the scope of the claim differs significantly depending on which of the reasonable interpretations one adopts. *Ex Parte Miyazaki*, 89 USPQ2d 1207, 1211-12 (BPAI 2008). Breadth does not imply indefiniteness. *In re Miller*, 441 F.2d 689, 693 (CCPA 1971).

The second paragraph of § 112 also imposes the duty to draft claims which "particularly point out and distinctly [claim] *the subject matter which the applicant regards as the invention*." [Emphasis added.] Nevertheless, the subject matter set out in the claims must be presumed to be that which the applicant regards as the invention. *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971). The Examiner bears the burden of proving that the applicant has not complied with this duty.

ANALYSIS

The absence of any recitation of a plunger actuator or an equivalent structure from claim 55 affects the breadth of the claim but not the definiteness of the claim. Although ambiguity may imply indefiniteness, *Miyazaki*, 89 USPQ2d at 1211-12, the possibility that one of ordinary skill in the art might use structure other than a plunger actuator to cause actuator

movement when the cap, in the first position, is depressed in a generally radial direction does not imply that the scope of claim 55 is ambiguous.

As the Examiner concedes, cams, linkages and even electronic solenoids could possibly be used to cause actuator movement. (Ans. 8-9.) These alternatives imply that the use of a plunger actuator to cause actuator movement is not an inherent feature of the subject matter of claim 55. One of ordinary skill in the art would have no reason to read such a plunger actuator into claim 55. Even assuming, as the Examiner reasons, that one of ordinary skill in the art "would be left to guess which of a multitude of mechanical elements could possibly be used to perform the functions necessary" to cause actuator movement (*see* Ans. 9), this assumption relates to the engineering choices required to implement the claimed subject matter and not to the ability of one of ordinary skill in the art to determine the legal metes and bounds measured off by the language of the claim.

The Examiner cites *In re Collier*, 397 F.2d 1003 (CCPA 1968) as support for the rejection of claim 55 under the second paragraph of § 112. In *Collier*, our reviewing court construed the applicant's claim as reciting "nothing more than a bare combination of a crimpable perforated ferrule and a ground wire, regardless of particular relationships." *Id.* at 1005. Despite the breadth of the claim, the applicant argued patentability based on structural relationships between the recited elements. Our reviewing court agreed with the Board that the applicant's arguments demonstrated that the claim did not recite the subject matter which the applicant regarded as the invention. *Id.*

Here, the Appellant appears to have consistently argued that the plunger actuator is not part of the subject matter recited in claim 55. (*See*,

e.g., App. Br. 6-7.) As the Appellant points out (*see* Reply Br. 3), the Abstract and Summary of the Invention sections of the Appellant's Specification do not mention the plunger actuator as an element of what the Appellant most broadly conceives to be the invention. The Examiner provides no persuasive evidence that the subject matter of claim 55 is not what the Appellant regarded as the invention. In the absence of such evidence, claim 55 is presumed to recite the invention as the Appellant regards it.

Claim 75 recites a tactical defense device including a slidingly insertable sleeve for holding a pressurized spray cartridge. The Appellant does not identify any formal definition of the term "slidingly insertable" in the Specification. The ordinary usage of the term "slidingly insertable" is sufficiently broad to include a sleeve having an outer diameter that enables the sleeve to be slidingly inserted (that is, inserted by sliding) within a cylindrical body of the device. This ordinary usage is consistent with the usage of the term "slidingly insertable" in the disclosure of the Specification. (*See*, *e.g.*, Spec. 7, para. 0044.) As the Examiner points out (*see* Ans. 10), claim 75 does not recite that the sleeve must be capable of sliding after the sleeve is inserted.

The Examiner finds that DeLucia's sleeve *46* corresponds to the sleeve recited in claim 75. (Ans. 5 and 6.) As the Examiner points out, the sleeve *46* has an outer diameter smaller than the inner diameter of the elongated tubular portion *14*. (FF 6.) Consequently, the outer diameter of the sleeve *46* enables the sleeve *46* to be slidingly inserted within the elongated tubular portion *14* of DeLucia's device. In other words, DeLucia discloses a device including a slidingly insertable sleeve for holding a

propellant capsule or pressurized spray cartridge *44*. Even though DeLucia's sleeve *46* is riveted to the elongated tubular portion *14* after the sleeve is inserted into the elongated tubular portion, the sleeve *46* is slidable as it is being inserted.

Claim 78 recites a device including a guide pin for guiding movement of an actuator button. Claim 78 depends from claim 77, which recites that the actuator movement is caused by depression of the actuator button in a generally radial direction. The Examiner finds that DeLucia's push button *122* corresponds to the actuator button recited in claim 78 (Ans. 5); that DeLucia's slide block *130* corresponds to the recited actuator (*Id.*); and that either DeLucia's plunger *124* or DeLucia's optic rod *138* corresponds to the guide pin recited in claim 38. (Ans. 6.) As the Appellant argues (App. Br. 11-12; Reply Br. 6), neither the plunger *124* nor the optic rod *138* appears to guide the movement of the push button *122* in a generally radial direction. (FF 18.) In fact, neither the plunger *124* nor the optic rod *138* contact the push button *122* so as to enable either of them to guide the path of movement of the push button *122*. (FF 17.) Even assuming for purposes of this appeal only that either the plunger *124* or the optic rod *138* guides the movement of the slide block or actuator *130* (*see* Ans. 11), the capacity to guide the movement of the slide block *130* would not correspond to a capacity to guide movement of the push button or actuator button *122*. Neither the plunger *124* nor the optic rod *138* is a guide pin as recited in claim 78.

Claims 81, 82, 84, 85 and 91 recite a device including a nozzle plate supported within the forward portion of a dispenser and defining a discharge orifice. The Examiner finds that DeLucia's lens *25* corresponds to the

recited nozzle plate and that the discharge orifice *66* defined by DeLucia's discharge tube *68* corresponds to the recited discharge orifice. (Ans. 10.) The Examiner provides no explanation how DeLucia's lens *25* "defines" the orifice *66*. Figure 1 of DeLucia depicts the discharge tube *68* which defines the orifice *66* as being positioned radially outwardly from the lens *25*. (FF 12.) Therefore, DeLucia's lens *25* is not a nozzle plate which defines a discharge orifice.

CONCLUSIONS

The Appellant has shown that the Examiner erred in concluding that claim 55 fails to particularly point out and distinctly claim the subject matter which the Appellant regards as the invention. Therefore, the Appellant has shown that the Examiner erred in rejecting claim 55 and its dependent claims 56, 59-61 and 64-73 under 35 U.S.C. § 112, second paragraph, as being indefinite.

The Appellant has not shown that the Examiner erred in finding that DeLucia discloses a slidingly insertable sleeve for holding a pressurized spray cartridge as recited in claim 75. The Examiner has articulated reasoning with some rational underpinning sufficient to support the conclusion that the subject matter of claim 75 and grouped claims 76, 77, 79, 83 and 87-90 would have been obvious from the combined teachings of DeLucia and Parsons. The Appellant has not shown that the Examiner erred in rejecting claims 75-77, 79, 83 and 87-90 under § 103(a) as being unpatentable over DeLucia and Parsons.

The Appellant has shown that the Examiner erred in finding that DeLucia discloses a guide pin for guiding movement of an actuator button

caused by depression of the actuator button in a generally radial direction as recited in claim 78. The Examiner has not articulated reasoning with some rational underpinning sufficient to support the conclusion that the subject matter of claim 78 would have been obvious from the combined teachings of DeLucia and Parsons. The Appellant has shown that the Examiner erred in rejecting claim 78 under § 103(a) as being unpatentable over DeLucia and Parsons.

The Appellant has shown that the Examiner erred in finding that DeLucia discloses a nozzle plate which is supported within the forward portion of the dispenser and which defines a discharge orifice as recited in claims 81, 82, 84, 85 and 91. The Examiner has not articulated reasoning with some rational underpinning sufficient to support the conclusion that the subject matter of claim 91; its dependent claims 86 and 96-102; and claims 81, 82, 84 and 85 would have been obvious from the combined teachings of DeLucia and Parsons. The Appellant has shown that the Examiner erred in rejecting claims 81, 82, 84-86, 91 and 96-102 under § 103(a) as being unpatentable over DeLucia and Parsons.

DECISION

We AFFIRM the Examiner's decision rejecting claims 75-77, 79, 83 and 87-90.

We REVERSE the Examiner's decision rejecting claims 55, 56, 59-61, 64-73, 78, 81, 82, 84-86, 91 and 96-102.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

mls

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